FFFFFFFF

What is FFFFFFFF

IP Address Directory

HP ProBook 4510s oops

What is FFFFFFFF?

Most of all, FFFFFFFF is a number in hexadecimal notation

FFFFFFFF is the biggest 32-bit number in hexadecimal (or **hex**) notation. The hexadecimal notation is a way of representing base 16 numbers. The digits **0** to **9** are written as in the decimal numbers, while the digits **10** to **15** are written as **A** to **F**. The number is the sum of all the digits multiplied by 16 powered to the subtraction of the position of the digit from right to left and 1.

$$S = \sum_{i=1}^{N} Di \cdot B^{i-1}$$

where **S** is the resulting number, **N** is the number of digits of the number, **i** is the position from right to left of the digit **Di** in the number, **B** is the base, which is 16 in our case.

If we calculate the number in decimal, **FFFFFFFF** in decimal is **4294967295**. In octal **FFFFFFFF** is **37777777777** or **037777777777**. In binary **FFFFFFFF** is **11111111111111111111111111111111** or **0b11111111111111111111111111111111** . In quaternary base **FFFFFFFF** is **3333333333333333**. The above was true if we interpret **FFFFFFFF** as unsigned integer. If we interpret **FFFFFFFF** as a signed integer and the maximum bits of the number are **32**, then **FFFFFFFF** is **-1**.

If we increase **FFFFFFFF** by **1**, we get **100000000**, it it was possible or overflow **32** bits, and we get **00000000** if it was not possible to overflow **32** bits. If we decrease **FFFFFFFF** by **1**, we get **FFFFFFFE**.

We can use the hexadecimal representation to conduct operations on binary numbers. If we use **32-bit** registers to calculate the operations, **x AND FFFFFFFF = x**, **x OR FFFFFFFF = FFFFFFFF**, and, if we interpret the numbers as signed integers, **x XOR FFFFFFFF = -x**.

FFFFFFFF has some related terms in the computer science

There are a lot of terms in the computer science, which are associated tightly or loosely with **FFFFFFFF**. There can be an exit code **FFFFFFFF**, access violation trying to access address **FFFFFFFF**, or general protection fault **FFFFFFFF**, illegal operation **FFFFFFFF**, if operations are enumerable, unhandled exception **FFFFFFFF**, stack overflow at position **FFFFFFFF**, I would say what a big stack, crc32 which is **FFFFFFFF**, net mask **FFFFFFFF**, subnet mask **FFFFFFFF**, network broadcast address **FFFFFFFF**, wrong host address **FFFFFFFF**, error **FFFFFFFF**, little endian **FFFFFFFF**, big endian **FFFFFFFF**... enough.

FFFFFFFF is an euphemism of the F-word

Some people associate **FFFFFFFF** with the 4-letter F-word? Others associcate FFFFFFFF with Friday. I wonder why. Did they study math, computer science or telecommunications?

Keywords: FFFFFFFF, hex, dec, hexadecimal, mask, net, subnet, error code FFFFFFFF, math, decimal, f-word, notation, base, stack overflow, general protection fault, exit code, access violation, unhandled exception, 32-bit, crc32, stack, position, computer science, mathematics

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